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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,090	07/31/2001	Kevin Collins	10006963-1	2456

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

DODDS, HAROLD E

ART UNIT	PAPER NUMBER
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2177

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DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,090

Applicant(s)

COLLINS ET AL

Examiner

Harold E. Dodds, Jr.

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date 2. | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13, 16-19, 22, 23, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed et al. (U.S. Patent No. 5,862,325) and Wilson et al. (U.S. Patent No. 6,070,159).

3. Reed renders obvious independent claims 1 and 10 as follows:
“...identifying said data on said storage device...” at col. 20, lines 15-17 and col. 70, lines 26-31.
“...categorizing said identified data...” at col. 7, lines 7-9 and col. 20, lines 15-17.
“...based on a category thereof...” at col. 7, lines 7-9.

Reed does not teach the reallocation of data.

4. However, Wilson teaches the reallocation of data as follows:
“...and reallocating at least a portion of said identified data...” at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36.

It would have been obvious to one of ordinary skill at the time of the invention to combine Wilson with Reed to provide for the reallocation of data in order to minimize the amount of small blocks of storage that can not be used efficiently and increase the amount of available storage space on storage units. Reed and Wilson teach similar

applications. They both teach the use of computers, the use of databases, the use of networks, the use of files, the use of records, the use of data, the use of groups, the use of identifiers, the use of portions, and the use of users. Reed provides the identification and categorizing of data, the use of storage devices, and providing alerts when thresholds are reached and Wilson provides the reassignment of portions of identified data.

5. As per independent claim 28, the "...means for identifying data on said storage device..." is taught by Reed at col. 20, lines 15-17 and col. 70, lines 26-31, the "...means for categorizing said data..." is taught by Reed at col. 7, lines 7-9 and col. 20, lines 15-17, the "...means for alerting a user..." is taught by Reed at col. 56, lines 35-37, the "...when a threshold for said categorized data is satisfied..." is taught by Reed at col. 89, lines 55-58 and col. 7, lines 7-9, "...and means for reallocating at least a portion of said identified data..." is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36, and the "...after said user is alerted..." is taught by Reed at col. 56, lines 35-37.

6. As per claim 2, the "...alerting a user when at least one threshold..." is taught by Reed at col. 56, lines 35-37 and col. 89, lines 55-58 and the "...for a category of said data is satisfied..." is taught by Reed col. 7, lines 7-9 and col. 31, lines 56-57.

7. As per claims 3 and 22, the "...defining a number of categories for said data..." is taught by Reed at col. 17, lines 35-37 and col. 104, lines 20-24.

Art Unit: 2177

8. As per claim 4, the "...reallocating at least a portion of said identified data...", is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36 and the "...comprises moving said data...", is taught by Reed at col. 69, lines 28-30.

9. As per claim 5, the "...reallocating at least a portion of said identified data...", is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36 and the "...comprises compressing said data...", is taught by Reed at col. 14, lines 41-47.

10. As per claims 6 and 26, the "...reallocating at least a portion of said identified data...", is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36 and the "...comprises archiving said data...", is taught by Reed at col. 21, lines 52-60.

11. As per claims 7 and 27, the "...reallocating at least a portion of said identified data...", is taught by Wilson at col. 9, lines 9-14, col. 8, lines 56-61, and col. 5, lines 30-36 and the "...comprises moving said data to an Internet storage device...", is taught by Reed at col. 69, lines 28-30 and col. 27, lines 36-45.

12. As per claim 8, the "...identifying and categorizing said data...", is taught by Reed at col. 20, lines 15-17 and col. 7, lines 7-9 and the "...is performed on a periodic basis...", is taught by Reed at col. 27, lines 45-47.

13. As per claim 9, the "...identifying and categorizing said data...", is taught by Reed at col. 20, lines 15-17 and col. 7, lines 7-9 and the "...is based on at least one attribute of said data...", is taught by Reed at col. 29, lines 44-46.

14. As per claim 11, the "...program code for identifying data on said storage device...", is taught by Reed at col. 20, lines 15-17 and col. 70, lines 26-31 and the "...comprises program code for generating and maintaining a list of data on said storage device...", is taught by Reed at col. 8, lines 64-65, col. 29, lines 52-53, and col. 70, lines 26-31.

15. As per claim 12, the "...management interface...", is taught by Reed at col. 16, lines 15-21, the "...and program code for displaying said categorized data to a user...", is taught by Reed at col. 26, lines 49-52 and col. 7, lines 7-9, and the "...via said management interface...", is taught by Reed at col. 16, lines 15-21.

16. As per claim 13, the "...said management interface...", is taught by Reed at col. 16, lines 15-21 and the "...comprises a graphic for displaying said categorized data...", is taught by Reed at col. 66, lines 19-26 and col. 7, lines 7-9.

17. As per claim 16, the "...comprising program code for receiving commands from said user...", is taught by Reed at col. 52, lines 25-29, the "...for reallocating said portion...", is taught by Wilson at col. 9, lines 9-14 and col. 8, lines 56-61,

the "...of said categorized data...", is taught by Reed at col. 7, lines 7-9,
and the "...via said management interface...", is taught by Reed at col. 16, lines 15-21.

18. As per claim 17, the "...said commands comprise selections of said categorized data...", is taught by Reed at col. 52, lines 25-29, col. 7, lines 1-9, and col. 71, lines 14-16

and the "...for managing said data...", is taught by Reed at col. 71, lines 14-16.

19. As per claim 18, the "...said management interface is displayed for said user...", is taught by Reed at col. 16, lines 15-21 and col. 26, lines 49-52
and the "...when a threshold for said data is satisfied...", is taught by reed at col. 89, lines 55-58 and col. 31, lines 56-57.

20. As per claim 19, the "...an information database...", is taught by Reed at col. 9, lines 20-21,
the "...and program code for accessing said information database...", is taught by Reed at col. 67, lines 23-25 and col. 9, lines 20-21,
and the "...for identifying and categorizing said data...", is taught by Reed at col. 20, lines 15-17 and col. 7, lines 7-9.

21. As per claim 23, the "...comprising program code for defining at least one threshold...", is taught by Reed at col. 110, lines 38-42 and col. 89, lines 55-58
and the "...wherein a user is alerted when said at least one threshold is satisfied..." is taught by Reed at col. 56, lines 35-37, col. 89, lines 55-58, and col. 31, lines 56-57.

22. As per claim 29, the "...means for selecting said data according to said category thereof...", is taught by Reed at col. 68, lines 50-56 and col. 7, lines 7-9,

Art Unit: 2177

the "...wherein said means for reallocating only reallocates..." is taught by Wilson at col. 9, lines 9-14,

and the "...said data selected thereby..." is taught by Reed at col. 68, lines 50-56.

23. Claims 14, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed and Wilson as applied to the claims above, and further in view of Luong et al. (U.S. Patent No. 6,684,229).

As per claim 14, the "...said graphic for displaying said categorized data..." is taught by Reed at col. 66, lines 19-26 and col. 7, lines 7-9, but the "...is a pie chart..." is not taught by either Reed or Wilson.

However, Luong teaches the use of pie charts as follows:

"...As shown therein, the capacity monitor window includes a pie chart representation of the selected space and free space available on the secondary storage device, e.g., Genesis hard drive..." at col. 19, lines 23-29.

It would have been obvious to one of ordinary skill at the time of the invention to combine Luong with Reed and Wilson since Reed, Wilson, and Luong teach the use of computers, the use of databases, the use of networks, the use of files, the use of records, the use of data, the use of identifiers, the use of portions, and the use of users and Reed and Luong teach the use of formats. Reed provides the identification and categorizing of data, the use of storage devices, and providing alerts when thresholds are reached, Wilson provides the reassignment of portions of identified data, and Luong provides pie charts and file allocation tables, which are a class of file association tables.

24. As per claim 20, the "...a file association table..." is taught by Luong at col. 14, lines 39-43,

Art Unit: 2177

the "...and program code for accessing said file association table..." is taught by Luong at col. 7, lines 20-23 and col. 14, lines 39-43, and the "...for identifying and categorizing said data..." is taught by Reed at col. 20, lines 15-17 and col. 7, lines 7-9.

25. As per claim 21, the "...said data is categorized..." is taught by Reed at col. 7, lines 7-9, the "...using said file association table..." is taught by Luong at col. 7, lines 20-23, the "...based on an identity of the application..." is taught by Reed at col. 20, lines 15-20 and col. 70, lines 31-36, and the "...that generated said data..." is taught by Reed at col. 69, lines 28-30.

26. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over reed and Wilson as applied to claims 12 above, and further in view of Siow et al. (U.S. Patent No. 6,301,590).

As per claim 15, the "...said management interface displays information for said categorized data..." is taught by Reed at col. 16, lines 15-21, col. 26, lines 49-52, and col. 7, lines 7-9,

but the "...in a drill-down format..." is not taught by either Reed or Wilson.

However, Siow teaches the use of drill-down formats as follows:

"...FIG. 7B illustrates one of the manipulations that the user may perform, namely a changing from a chart format to a drill-down chart format..." at col. 9, lines 33-35.

It would have been obvious to one of ordinary skill at the time of the invention to combine Siow with Reed and Wilson since Reed, Wilson, and Siow teach the use of

computers, the use of databases, the use of networks, the use of files, the use of data, the use of identifiers, and the use of users and Reed and Siow teach the use of formats. Reed provides the identification and categorizing of data, the use of storage devices, and providing alerts when thresholds are reached, Wilson provides the reassignment of portions of identified data, and Siow provides drill-down chart formats.

27. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed and Wilson as applied to claim 23 above, and further in view of Gelb et al. (U.S. Patent No. 5,018,060).

As per claim 24, the "...said at least one threshold is a default..." is not taught by either Reed or Wilson.

However, Gelb teaches the use of thresholds and defaults as follows:

"...Unless otherwise selected, the defaults for all of the four storage groups are: auto-migration is enabled, automatic backup is enabled, no automatic dump is permitted, there are no migration thresholds set and a dump class is left blank..." at col. 10, lines 47-51.

It would have been obvious to one of ordinary skill at the time of the invention to combine Gelb with Reed and Wilson since Reed, Wilson, and Gelb teach the use of computers, the use of databases, the use of files, the use of records, the use of data, the use of groups, the use of identifiers, the use of portions, and the use of users and Reed and Gelb teach the use of formats. Reed provides the identification and categorizing of data, the use of storage devices, and providing alerts when thresholds are reached, Wilson provides the reassignment of portions of identified data, and Gelb provides default thresholds and the role of capacities of storage devices.

Art Unit: 2177


28. As per claim 25, the "...said at least one threshold is based on available capacity of said storage device...", is taught by Gelb at col. 10, lines 19-24 and col. 4, lines 25-36.

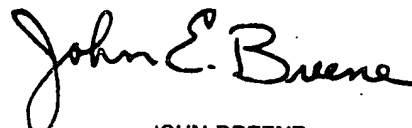
Conclusion

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (703)-305-1802. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (703)-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Harold E. Dodds, Jr.
Patent Examiner
June 11, 2004


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